# Draft Summary of the Engineering and Operations Work Group Meeting Oroville Facilities Relicensing (FERC Project No. 2100) January 10, 2003

The Department of Water Resources (DWR) hosted the Engineering and Operations Work Group meeting on January 10, 2003 in Oroville.

A summary of the discussions, decisions made, and action items is provided below. This summary is not intended to be a transcript, analysis of the meeting, or to indicate agreement or disagreement with any of the items summarized, except where expressly stated. The intent is to present an informational summary for interested parties who could not attend the meeting. The following attachments are provided with this summary:

Attachment 1 Meeting Agenda Attachment 2 Meeting Attendees Attachment 3 Recreation Model

Attachment 4 Central Valley Future Water Supplies

Attachment 5 Summary of Hydrologies

#### Introduction

Attendees were welcomed to the Engineering and Operations Work Group meeting. The meeting agenda and desired outcomes were reviewed. The meeting agenda and list of meeting attendees and their affiliations are appended to this summary as Attachments 1 and 2, respectively. The Facilitator explained that it was not possible to establish a teleconference line into the meeting room. Participants on the conference line asked to call back at 12:30 p.m. for a briefing on the meeting. The call-in participants are noted on the list of meeting attendees.

## November 22, 2002 Meeting Summary and Action Items

A summary of the November 22, 2002 Engineering and Operations Work Group is posted on the relicensing web site. The Facilitator reviewed the status of action items from that meeting as follows:

Action Item EO#62 Provide electronic or mail versions of the two reference documents from

1994 and 1995 that outline hydrologic inputs to CALSIM II and input

demands from the Bulletin 160 process.

Responsible: DWR

Status: Documents were distributed electronically and by mail and were also

available for distribution at this Work Group meeting.

Carry Over Action Item Action Item EO#55

**EO#55** Provide summary of watershed modeling issues for Work Group, with input

from Work Group participants.

Responsible: DWR

Status: Curtis Creel, Operations Resource Area Manager for DWR, reminded

participants that Butte County representative Ed Craddock had requested this item be discussed in December, and he informed the group that Ed provided a draft letter outlining his thoughts with regard to watershed modeling efforts. Ed indicated that while watershed issues and particularly potential changes in runoff patterns are a concern to Butte County, he suggested that an approach to Butte County modeling issues already initiated by DWR's Division of Planning and Local Assistance may be adequate for dealing with the County's initial modeling needs. He

suggested that the issue be set aside for now, realizing that it may surface

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later in the process during settlement negotiations. The participants agreed to table the issue of watershed modeling at this time.

Curtis explained an adjustment that was made to the meeting agenda distributed in advance of the meeting. DWR had originally planned to discuss the specifics of the hydrology data sets at this meeting but the modeling consultants were not ready so that discussion will be rescheduled for a later meeting.

# **Recreation Modeling Discussion**

Curtis Creel reviewed the approach planned for operations modeling of the Oroville Facilities. He also described how the models will work together to provide both a broad picture and detailed view of the Oroville Facilities. He explained monthly time step data from CALSIM II will be disaggregated using the local operations model to evaluate various alternatives that might be developed to answer questions such as how best to optimize power generation while still meeting release requirements to the river. Curtis described the temperature model as a straight simulation that may feed back into the local operations model to determine how releases might be made under various strategies to achieve desired temperatures. Curtis described numerous sensors that are currently recording temperature data in addition to weekly 'grab' samplings underway. Michael Pierce suggested that the sensors currently in place to collect data for the relicensing effort should be continued through the next license term. Curtis responded that DWR will continue to collect temperature profile data in the reservoir as they have since construction of the project and will likely continue to monitor inflows and outflows to the river.

The participants discussed how models will help to optimize operations within constraints and Curtis reminded the group that the analysis will be comparative in nature with a base condition model run used to measure incremental effects against any proposed scenario model runs.

Doug Rischbieter, Recreation Resource Area Manager for DWR, briefly described the Recreation and Socioeconomics studies currently underway and the relationship between Oroville Facilities operations and recreational use. Water surface elevations will be useful to the Recreation and Socioeconomics Work Group to assist them in evaluating both opportunities and constraints for recreation use under various scenarios. He explained that while the summer months are the peak recreational use months, the water surface fluctuations throughout the year would be valuable to evaluate during off-peak recreation use. Curtis outlined a timeframe for modeling output availability, and Doug concurred that the timing would work for their needs.

Jim Vogel with the consulting team described the three models currently being reviewed for possible use in the recreation studies and explained that they intend to use either one of these existing models or develop a hybrid. One model was developed for the Central Valley Project Improvement Act project (CVPIA) and includes simple inputs for the Oroville Facilities. Another model was developed for Shasta – Trinity in 1994 while the third was used in Monterey and includes socioeconomics variables. Jim indicated that all of the models are very simple with few variables, and he was comfortable that the current suite of operations models would provide the needed information that may include monthly water levels, maximum drawdowns and annual variability with water-year type under various operational scenarios.

Once the decision is made on which recreation model will be used, a summary will be provided to the Plenary Group's Modeling Protocol Task Force for discussion and eventual distribution to the Plenary Group.

## **Watershed Modeling Discussion**

See discussion under Action Item EO#55 above.

# **Next Steps and Modeling Update**

Curtis informed participants that he expects the local operations models to be ready by March 2003 and the temperaturel model to be ready by the end of June 2003. He suggested that we hold the scheduled January 31, 2003 Engineering and Operations Work Group meetings as a check-in video/teleconference. The Engineering and Operations Work Group agreed their next meeting would be:

Date: January 31, 2003 Time: 10:00 a.m. – 12:00 p.m.

Location: Videoconference between Oroville Field Division, Joint Operations Center and San

Joaquin Field Division with a conference call-in number available.

## **Action Items**

The Engineering and Operations Work Group identified no action items at this meeting.